



An Integrative Approach to Back Pain

by Timothy McCall, MD

Nearly everyone experiences low back pain at one time or another. Current estimates rate back problems as the second most common cause people consult MDs, the top reason for visiting a chiropractor and the leading cause of disability of people under 45. The most common malady is referred to as low back strain—a catch-all phrase that includes minor muscle, ligament and joint problems in the lumbar spine and surrounding tissues. In more severe cases, low back strain progresses to sciatica, a condition in which the shock-absorbing disk that separates two spinal vertebrae bulges out and compresses the nearby root of the sciatic nerve. Less commonly, low back pain can be a sign of a more serious medical condition (see sidebar).

The new thinking about treating lower back problems emphasizes a more active approach than what most conventional physicians recommended until recently. For years standard medical therapy was three to seven days of strict bed rest. Those recommendations have been changing since a 1995 study in the *New England Journal of Medicine* found that bed rest actually slowed recovery: Patients who continued their ordinary activities (within the limits permitted by their pain) were symptom-free and back on the job sooner. A possible explanation is that lying in bed for days deconditions back and abdominal muscles enough that it counteracts much of the benefit of resting the spine.

For an example of a more active approach, consider the story of Christopher Morey, a 45 year old computer network administrator from Traverse City, Michigan. Morey says he'd "always had a bad back." His usual discomfort had been getting worse for about six months when, while carrying out a not-terribly-heavy garbage bag, he noted a sudden, excruciating pain in his lower back which shot all the way down to his foot—a classic symptom of sciatica. Following the guidance of Richard Miller, a yoga therapist and teacher, within a day of injuring himself, Morey began a regimen of gentle yoga poses designed to help his back. Meanwhile, Morey's primary care doctor ordered an MRI scan, then referred him to a neurosurgeon. That doctor—chosen because he had the reputation of not recommending back surgery too often—took one look at the giant bulging herniated disk on Morey's MRI and chuckled. "If it was half this size, I'd still want



to operate.” What he proposed was a “mini diskectomy,” an operation in which the herniated disk is removed through a one inch incision in the back. By that

time, however, Morey was already starting to feel a little better and decided to stick with the yoga and see what happened.

Studies show that most people get over an episode of acute back strain using any one of a variety of treatment modalities. Physical Therapy (PT) early in the process also appears to be beneficial. A study published in the January 2000 issue of the Journal of Occupational and Environmental Medicine found that the speediest recoveries were made by back pain sufferers who began PT the day of the injury or the day after. People who began two to seven days later did better than those who started PT the following week.

Also useful in getting through an acute episode are such hands-on approaches as massage, chiropractic and osteopathy (though not all osteopaths do spinal manipulation so ask before making an appointment). The evidence on acupuncture is mixed but since its very safe it may be worth a shot. Medication can be useful in relieving symptoms. Doctors commonly recommend anti-inflammatory pain-relievers like aspirin or ibuprofen (Motrin, Advil, etc.) but these drugs can cause stomach upset and intestinal bleeding. Acetaminophen (Tylenol, etc.) also can relieve pain and, when taken in recommended doses, is much safer. Herbal remedies such as willow bark tea (which contains the active ingredient of aspirin) and topical creams containing red pepper (capsaicin) or arnica can also bring relief. Liniments based on methyl-salicylate, menthol and camphor are soothing and very safe. Many people find applications of ice helpful and, once the injury is starting to heal, switch to moist heat either alone or alternated with ice.

These treatments can all help you through a bout of acute backache. The problem is that they may not lead to the kind of long-term changes that are likely to keep back troubles at bay. That’s why it’s important to understand what sets you up for back pain in the first place, how factors like posture and your work and living environment affect your back’s health and what you can do to change what might seem inevitable.

A Long-Term Prevention Strategy

Once Christopher Morey was a little farther down the road to recovery, he booked a few private lessons with Roger Eischens, a yoga instructor from Madison,



Wisconsin, who helped him refine his yoga postures with an eye toward long-term prevention of problems. Eischens, who has extensive training in Iyengar

yoga, found that despite Morey's tremendous flexibility he had subtle muscular imbalances between his left and right side that were predisposing him to back problems. In Morey's case, the imbalance had to do with the way he used his shins, but Eischens stresses that the underlying problems vary from patient to patient and require a skilled eye to diagnose. He recommends trying to find a yoga teacher or yoga therapist with years of experience.

Eischens says his approach is to "start away from the problem." In the case of lower back pain, he begins by looking the feet and the shoulder blades to see if misalignment and the failure to use muscles in some areas are leading to strain in others. He was able to adjust Morey's yoga postures to "stimulate under-stimulated muscles" in his legs and trunk.

Galen Cranz, an Alexander Technique teacher and Professor at the University of California at Berkeley, believes if we are going to avoid back problems we also "must focus on changing the unconscious habits of daily life." People often assume a C-shaped slump of their backs when they sit, for example, without any awareness of doing so. Cranz whose own spinal curvature (scoliosis) sparked her interest in the Alexander technique believes it to be "the greatest single system for treating biomechanical problems."

Like yoga, the Alexander technique can be used both to get over an acute episode of back pain and to prevent problems in the future. Its comprehensive analysis of posture and movement allows you to not only sit and stand better but "to brush your teeth and open doors in better ways." Cranz, who has also studied Iyengar yoga believes the benefits of the two systems can be synergistic.

Much back pain, of course, can be traced to sedentary lifestyles. A lack of exercise leads to deconditioning of both back and abdominal muscles which support the spine. Regular aerobic exercise--particularly less traumatic activities like walking, biking and swimming--and exercises aimed specifically at strengthening the abdominal muscles such as stomach cruches are known to decrease the likelihood of developing back strain. Poor lifting technique can also cause problems. Sitting itself puts enormous strain on the lumbar spine, particularly if one sits in the slumped posture so typical of modern life.



Cranz, who is also the author of *The Chair: Rethinking Culture, Body, and Design*, thinks that most chairs are poorly designed for spinal health--particularly for women under five foot six inches. She suggests sitting, whenever possible, with the feet flat on the floor and the sit bones (the bony prominence in each buttocks) higher than the knees. This position allows the lumbar spine to

maintain its normal, healthy inward curve. Ideally the angle between the legs and the trunk should be around 120 degrees but anything greater than 90 degrees is helpful. People whose jobs provide chairs that don't accommodate this can try placing a large book or a thin cushion on the seat of the chair to raise the level of the hips and another book on the floor if their feet don't reach the ground. Or she suggests scooting forward to perch on the edge of the chair keeping your spine straight and a healthy angle at the hip (this may not sound inviting but is a surprisingly comfortable position).

Ergonomically designed chairs may not solve the problem, however, if they are so comfortable that we don't move once we're in them. "There's no such thing as one perfect posture," Cranz maintains. Frequent changes of position are natural and healthy. She suggests that workers take frequent breaks and set up their offices that they have to get up to file or answer the phone. If you're at home or your workplace allows it, try sitting on the floor for a while. For spinal health, Cranz also recommends once a day spending 15 minutes lying on your back with your knees bent, feet flat on the floor and head supported on a book or folded blanket. It may also be helpful to look at emotional factors. Recent studies have found that job stress and life dissatisfaction both increase the risk of developing back pain. Some authorities, notably Dr. John Sarno, the author of *Healing Back Pain: The Mind-Body Connection*, believe that almost all back pain has emotional causes. While Sarno has focused on something other conventional doctors have ignored, some experts worry that blaming everything on emotions is too simplistic. Eischens, for one, advises to "be leery of anyone who tells you just to straighten out your emotions." You've got to look at your body too.

Christopher Morey continues to do yoga daily to keep his back strong and supple and it's really paid off. Not only has he had no problems from the herniated disk but his usual low back pain is completely gone. Now two years after narrowly escaping back surgery, Morey is even able to chop wood without any discomfort. "Back pain is a manifestation of an imbalance in the body," he says. "Whether you get surgery or not, you've still got that imbalance. And you've got to take steps to address it."

More Serious Causes Of Back Pain

Four major conditions cause back pain that can mimic that found in run-of-the-mill low back strain. Depending on your age and the presence of other symptoms, you may need to see a doctor to make sure you haven't got on of these.

- Infection. The spine itself can rarely become infected but more commonly back pain is caused by a kidney infection. Other suggestive symptoms include fever, frequent urination and discomfort peeing.
- Cancer. Multiple myeloma is a bone marrow cancer that can take up residence in the spine. Other cancers, notably breast and prostate, can spread to bones of the spine.
- Spinal Fracture. Both cancer and osteoporosis can predispose to spinal fractures. Unrelenting pain not relieved by changing positions suggests the diagnosis.
- Neurological Problems. Several back conditions can cause loss of sensation in the legs or difficulty with urination or bowel control. These symptoms should prompt an immediate medical evaluation.

For More Information.

- American Society for the Alexander Technique
- American Massage Therapy Association
- Two books offer specific yoga poses that can be used for back pain and other maladies: *How to Use Yoga: A Step-by-Step Guide to the Iyengar Method of Yoga--for Relaxation, Health and Well-Being* by Mira Mehta and *Yoga for Wellness: Healing with the Timeless Teachings of Viniyoga* by Gary Kraftsow.



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